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Presuming consent in the ethics of posthumous sperm procurement and conception

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Abstract This paper compares standard conceptions of consent with the conception of consent defended by Kelton Tremellen and Julian Savulescu in their attempt to re-orient the ethical debate around posthumous sperm procurement and conception, as published in *Reproductive BioMedicine Online* in 2015. According to their radical proposal, the surviving partner's wishes are, in effect, the only condition that needs to be considered for there to be a legitimate moral case for these procedures: the default should be presumed consent to the procedures, whether or not the agent did consent or would have consented. The present paper argues that Tremellen and Savulescu's case for this position is flawed, but offers a reconstruction that articulates what may well be a hidden, and perhaps reasonable, assumption behind the argument. But while the new argument appears more promising, the reconstruction also suggests that the position of presumed consent is currently unlikely to be acceptable as policy. 

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Introduction

Posthumous sperm procurement (PSP) and the use of posthumously procured sperm in IVF involve the collection of sperm from a recently deceased male and its use for the purpose of posthumous reproduction. Since 1980, advances in assisted reproductive technology, and in particular the high success rates attributed to intracytoplasmic sperm injection (ICSI), have made PSP followed by IVF increasingly

feasible as a way to allow someone to conceive a child despite the death of the biological father. But it has also highlighted a number of ethical issues, such as whether these procedures shows proper regard for the well-being, needs and dignity of the orphaned child (Landau, 2004) and, more fundamentally, whether proper regard for the autonomy of the deceased always requires his explicit consent to the procedures prior to death. Such issues have been described as among 'the most challenging, difficult, and

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sensitive ... in the field of medicine' (Bahadur, 2002, p. 2769). This paper discusses a recent and radical attempt to re-orient the ethical debate, one that claims that the surviving partner's wishes are, in effect, the only condition that needs to be considered: the default should be presumed consent to the procedures, whether or not the agent did consent or would have consented.

The paper is organized as follows. The next section briefly describes some of the biomedical background relevant to the ethical discussion surrounding PSP and PSP-based conception, and then outlines the standard positions on consent. Section three describes Tremellen and Savulescu's recent challenge to the standard positions (Tremellen and Savulescu, 2015). I criticize this argument in section four, and then reconstruct the argument, bypassing certain problems identified in my critique and isolating what seem to me to be a crucial assumption underlying Tremellen and Savulescu's view. This allows me to compare their non-standard model of what is at stake with the more widely accepted standard model. The concluding section asks how the debate should be resolved.

The standard debate

PSP is generally performed with urgency following death. Following a decision being made by the grieving parties that PSP is desirable, local legal considerations must be addressed. A medical specialist with the requisite skills to extract sperm from the vas deferens, epididymis or testis, or to perform an orchiectomy, is then required to attend the deceased. Following extraction, the sperm or testicular tissue is transported to a specialist IVF laboratory where it is processed and frozen for future use.

The possibility of successful conception depends on a multitude of human factors, but particularly the viability of the retrieved sperm. Sperm viability is dependent on the time interval between death and sperm retrieval, and possibly also the temperature at which the body has been stored (Tash et al., 2003). Twenty-four hours has been suggested as an appropriate time interval during which retrieval is most likely to be successful (Land and Ross, 2002; Shefi et al., 2006), although the actual use of the sperm in IVF may well not take place until many years later. Once a decision has been made to use the sperm, it is thawed and injected, using ICSI, into oocytes retrieved during IVF treatment. The resulting embryo(s) are then cultured for up to 5 days before transfer into the uterus.

The process above demonstrates why it is important that there not be a lengthy legal process of negotiation or inquiry into whether the process of procuring sperm is allowed to go ahead; delays could make the path to IVF impossible. This does not mean that deciding whether it is permissible to proceed to IVF once sperm have been harvested should also be a quick process, since this decision may depend on ethically sensitive matters that require much more time to resolve. This will be true, for example, if it first needs to be shown that the deceased would have wanted to have a child on the basis of PSP (suppose that the standard of evidence for such a demonstration has been set at a very high level). Note that the constraints that this imposes on the decision process are also likely to be ethical costs, since they are imposed on the deceased's partner at a time when she may

well be under considerable stress. Whether they are seen as costs that should nonetheless be imposed will depend on one's views of the ethics of the situation.

As we will see below, Tremellen and Savulescu reject the requirement that those making the decision need to know that the deceased would have consented to PSP and conception. For many others, however, the only kind of knowledge that suffices is proof that the deceased explicitly consented to the procedures. Crucial to the ethics of PSP and PSP-based conception, therefore, is the question of consent. This is not the only important ethical question, of course. The consequences for any offspring will also need to be considered carefully. Where the child is put at high risk from genetically inheritable problems or is likely to be brought up in an environment that is a clear danger to the child's well-being, there is good reason not to allow PSP-based conception. Some commentators also worry about the more general potential of such a procedure to harm the child (see, e.g., Landau, 2004, and Pobjoy, 2007), while others think the risks are overstated (e.g. Strong et al., 2000; Tremellen and Savulescu, 2015). All agree that more studies are needed to determine the impact on the well-being of children born from the procedure.

Returning to the question of consent, it is clear that the most straightforward way of showing that the deceased would have consented to PSP and conception is to show that he explicitly consented to the procedures before death. This is certainly the test insisted on in most western legal jurisdictions that permit the procedures. Explicit consent in this sense should be understood as informed consent, where this includes competency, disclosure, understanding, voluntariness and consent (Beauchamp and Childress, 2012), perhaps with special conditions placed on the means and depth of disclosure (see especially the discussion in Strong, 2006, and Hostiuc and Curca, 2010). Of course, explicit consent of this type is not intended to override all other considerations. It may turn out that the situation faced by the partner after the man's death is so different that it is no longer likely that he would have consented to having a child under the new circumstances, and in that case a request for PSP and conception may well not be granted. So while explicit consent is considered necessary in most legal jurisdictions that permit the procedures, explicit consent on its own is not considered sufficient.

But some ethicists think that that the test of explicit consent should not even be a necessary condition, because the test is too demanding. Men who die suddenly, for example in accidents, are not likely to have thought about giving explicit consent to such a procedure, even though they may well have wanted their partners to have their child under these circumstances. There may even be some evidence of this: it may be known, for example, that the couple had discussed such a possibility. This has led a number of ethicists to propose another model of consent: implied or inferred consent, the idea that it is enough that the deceased would, on the balance of probabilities, have consented to the procedures had he been presented with the relevant facts pre-mortem and been able to discuss the matter with his partner.

The problem facing such a test of implied consent is obvious, however. As Jones and Gillett point out:

'... the difficulty lies with satisfactorily ascertaining the views of those who can neither confirm nor deny assumptions or inferences

made about them. ... [I]t is difficult to imagine that all men in serious relationships would desire posthumous reproduction. Even if a man was eager to be a father, in the normal sense, that would normally include both begetting a child (biological fatherhood) and contributing to its upbringing (social fatherhood) and to disconnect the two could conceivably undermine his paternal desires.' (Jones and Gillett, 2008, p. 282)

The matter may be put as follows. As is sometimes pointed out, the claim that there is implied consent to a procedure does not imply that anyone has in fact consented, but is simply the claim that a certain counterfactual is true: in the present case, that the deceased male would have met the conditions of informed consent had the matter been put to him. The evidence for such a counterfactual is in most cases far from reliable, however, given the nature of the case. Even the fact that the couple were known to be considering IVF, for example, tells us nothing on its own about the man's feelings about PSP and posthumous fatherhood. What if the partner states that the deceased had explicitly said that he would want sperm retrieval after death, an account perhaps corroborated by some family members? The problem with this scenario is that the man's partner as well as other family members have a clear conflict of interest. They have a motivation to hide the truth, or put a certain spin on things the deceased might have said or done (Bahadur, 2002, 2004; Schiff, 1999; Strong, 2006; Strong et al., 2000), and this seems to make reliance on their testimony unsafe. (Strong, 2006, argues that if there is indeed corroboration from family members this may in some cases overcome the problem of bias, but not when there is no one to corroborate the account.)

The situation is even worse if it is clear that the man had never explicitly discussed the issue of posthumous reproduction, for:

'[t]here is ... no empirical evidence demonstrating which character traits are correlated with a wish to proceed with PSP; nor is there any way of disentangling these wishes without an explicit statement about the exact terms of fatherhood contemplated and desired by the deceased. That crucial ambiguity makes it quite unclear what would constitute reasonable grounds for determining that a man had wanted posthumous reproduction, if he had never discussed the matter.' (Jones and Gillett, 2008, p. 282)

This epistemological conundrum is confirmed by a recent survey in which couples were separated from each other, and then asked about their partners' wishes for the use of their gametes in posthumous conception. Nearly a quarter of women incorrectly guessed the wishes of their partners (Nakhuda et al., 2011).

Existing judicial decisions in most western jurisdictions tend to reflect such doubts about the notion of implied consent. Indeed, some countries (France, Germany, Sweden, Canada) have an outright ban on the procedure, but where PSP is permitted the norm is a requirement of explicit consent. (Israel has the most liberal legislation – implied consent is enough, with the test for implied consent being little more than the partner's stated claim that the couple aimed to have children.) Ethicists are more divided. Some think that under a policy of implied consent the level of evidence required should

be set so high that little short of explicit consent would suffice. Others incline to a softer standard of evidence. Many would probably agree that the problem of how to determine men's hypothetical wishes in such a case show that more research is needed. Here are Jones and Gillett again:

'Given the research difficulties, it is (understandably) difficult to ascertain the wishes of men after they die. However, it would be possible (though it has not been evaluated) to ascertain the hypothetical desires of men who are still alive in relation to the possibility of (biologically) fathering children after death. Such a study would then help to establish an objective reasonable patient standard of wishes about posthumous reproduction that could serve as a fall-back position in the absence of a specific determination of the father's pre-mortem wishes.' (Jones and Gillett, 2008, p. 282)

Whether even this much is enough is controversial. Jones and Gillett themselves are sceptical; they think that 'such is the importance of the choice for any particular man that the default (or objective reasonable person) standard is not a good enough basis for the choice to be made with any confidence' (ibid.). Others will not set the bar so high.

That, in brief, is the present state of the debate about the kind of consent that is needed for an ethical case to be made for PSP and PSP-based conception. Given the debate, it is scarcely surprising that there is variation in the legal situation across countries, but with a predisposition towards a conservative approach that insists, at a minimum, on explicit informed consent rather than implied consent.

A challenge to the standard debate

In a recent paper Kelton Tremellen and Julian Savulescu claim that the standard two-option debate is seriously flawed (Tremellen and Savulescu, 2015; TS, for short). They argue instead for the option of presumed consent: not actual or implied consent, but the thought that the relevant authorities should act as if consent had been granted in the absence of written evidence to the contrary. Tremellen and Savulescu's rather complicated multi-pronged argument for this conclusion can be divided into two main parts. They begin by providing a number of reasons for taking PSP and PSP-based conception to be ethically justifiable even without explicit consent. First, many countries already allow for organ donation without the explicit consent of the deceased, in some cases – and this is what defines 'presumed consent' – without even proxy consent on the part of the family, but solely on the grounds that 'the deceased had not previously recorded their disapproval' (TS, p. 8). They add that the case of PSP should, if anything, be even less ethically problematic than the case of organ donation, since the surgical procedures relating to the latter are 'significantly more disfiguring to the corpse than surgical sperm retrieval'. Secondly, PSP benefits the donor, since the deceased gains a benefit prior to death through the benefit of motherhood gained by his partner after his death. In support, Tremellen and Savulescu cite an analogy with life insurance. Third, where there is a tension between an individual's self-interest and a demand of morality such as consideration for others, the individual has a moral duty to

follow this demand; it follows that, since he is in an optimal position to support his partner in her wish for a child at minimal cost to himself (a minor surgical procedure), the deceased has a duty – the duty of ‘easy rescue’ (Howard, 2006) – to assist his partner in this. To the objection that the deceased is harmed by such an action, Tremellen and Savulescu respond that ‘it is hard to see how [he] can be meaningfully harmed by such an action at that time, as he has no interests’ (TS, p. 8).

In addition to this set of reasons for their position, which I’ll call the General Argument, Tremellen and Savulescu also provide an argument that they say specifically supports presumed consent (the Specific Argument). First, they contend that the available evidence suggest that ‘most men surveyed actually support their partners having access to their sperm after death’, so that ‘it is a failure to respect their autonomy to fail to engage in PSP and conception’ (TS, p. 8). Implementing a policy of presumed consent would be an easy way to allow the wishes of the majority to be respected. (They mitigate this position by acknowledging that the acceptability of posthumous conception is likely to vary according to religion and culture, and that more surveys are needed.) Secondly, they reject, for the kinds of reasons we canvassed earlier, the view that a reliance on implied consent is an adequate alternative to explicit consent.

Tremellen and Savulescu’s General Argument makes much of the claim that PSP and PSP-based conception are in the best interests of the deceased’s partner, and that the interests of the deceased don’t outweigh these. They try to bolster this claim in the next section of the paper, and they begin by telling readers ‘to remember that the dead person no longer exists, so at that time cannot have interests or be autonomous’ (TS, p. 9). The point they wish to insist on is that the focus of arguments in this area should be the welfare of the living, in particular the deceased’s partner and any offspring resulting from conception, and they think that there is no evidence to suggest that having a child under these circumstances is not, by and large, a worthwhile undertaking, one that positively impacts the welfare of the mother and child (TS, pp. 9–10). They even claim that ‘by not allowing their widow access to their sperm after death to have a child, a husband may be harming his wife’. By contrast, it makes no sense to talk about the child being harmed through allowing these procedures since there would have been no child without the procedures.

I will have little to say about the final sections of the paper, which are devoted to more practical matters. Having argued that easier access to PSP and posthumous conception on the basis of presumed consent is desirable on moral grounds, Tremellen and Savulescu remind their readers that there is a very low level engagement with these procedures under current regimes of consent (Bahadur, 2002; Kroon et al., 2012; Shefi et al., 2006), and suggest that many more women would take advantage of them under a policy of presumed consent. Because implementing such a policy requires professional societies to modify their position statements on posthumous conception and requires assisted reproduction units to develop adequate treatment protocols, they conclude their discussion by describing and defending salient features of the kind of opt-out of scheme they themselves think should implement the idea of presumed

consent, including a proposed clinical protocol for PSP-based conception.

Evaluation and reconstruction

The position that Tremellen and Savulescu espouse is clearly far more liberal than any of the existing positions we have mentioned; more liberal, even, than the position adopted in Israel since there is no need on the Tremellen-Savulescu view for evidence that the couple were planning to have children. Unfortunately, however, they leave their arguments for this position in fairly sketchy form, so it is difficult to know how they would respond to certain obvious objections. I will focus on just three points, but they seem to me pivotal ones. In the first place, the appeal in their Specific Argument to statistical evidence concerning what men want is quite unconvincing. Recall Jones and Gillett’s call for surveys that ‘ascertain the hypothetical desires of men who are still alive in relation to the possibility of (biologically) fathering children after death ... [which] would then help to establish an objective reasonable patient standard of wishes about posthumous reproduction’ (Jones and Gillett, 2008, p. 249). The surveys to which Tremellen and Savulescu appeal establish no such standard. These involve men who have had their sperm frozen as well as couples trying to conceive, groups that are dissimilar from the general population in ways that are clearly relevant to the issue. If a survey-based argument invoking the hypothetical desires of men is to have any force, we need statistically more representative samples.

As it turns out, recent work on this issue does suggest that in the USA, at least, there is significant support among men and women for allowing their partners access to their gametes after death for the purpose of posthumous conception (Hans, 2014). Hans takes the new data to indicate that, in the case of men, ‘abandoning the prevailing presumption against consent in favour of a presumption of consent on the part of the deceased will result in the deceased’s wishes being honored ... three times more often’ (Hans, 2014, p. 10). Suppose that this result is shown to be robust, and that similar results can be obtained in other western jurisdictions. Even in that case, however, it is hard to see how this constitutes evidence for the more liberal standard of presumed consent unless an agent’s autonomy is assigned relatively low weight to begin with. After all, on the new standard the majority’s preferences dictate that PSP and PSP-based conception should be made available even in cases involving men who would never have given explicit consent had they been able to give full consideration to what is involved in the procedures. It is not surprising, then, that much of the force of Tremellen and Savulescu’s appeal to what men demonstrably want depends on their view that agent autonomy is trumped by other factors in the case of PSP and posthumous conception. In particular, they think that considerations of agent autonomy are swamped by *other*-regarding considerations in this case, a view that also motivates the various deontological considerations to which they appeal (e.g. satisfying the duty of easy rescue and preventing harm to the man’s partner).

It is at this point that the overall argument for their position is at its most unsatisfactory. Although it is not easy

to be sure (since there are tensions in the argument at this point, to be discussed below), it seems that the low weight assigned to the deceased man's autonomy in their General Argument is explained in terms of the philosophical basis of talk of interests, rights and duties. Thus, they claim that 'it is important to remember that the dead person no longer exists, so at that time cannot have interests or be autonomous' (TS, p. 9), which appeals to what is sometimes called the 'existence condition' on the ascription of morally significant properties to an entity. It is well known, however, that the existence condition has strikingly counterintuitive consequences; it implies, for example, that instantaneous killings do not harm, and do not affect the interests, of their victims, since there is no stage of their existence during which the alleged victim suffers the harm. The condition also cuts across conventional wisdom, both legal and moral, about signed deeds that concern events in which the signer has an interest but which will occur after the death of the person signing. Wills and life insurance policies are an example. Even though the person will no longer exist at the time at which such a deed is actioned, there is a strong intuition that the no-longer-existing person continues to have interests that we are morally and legally required to take into account.

A number of moral philosophers make room for such intuitions in their own account of posthumous harm (see, for example, [Feinberg, 1984](#), and [Grover, 1989](#)). It is easy to gain the impression that Tremellen and Savulescu think such accounts are bound to be philosophically flawed – unless a subject exists when his interests are allegedly infringed there simply is no subject to worry about. But that suggests far too broad a principle. It suggests, in particular, that we can stand in no relation now to something that does not exist now. But the consensus among philosophers, no less than among ordinary folk, overwhelmingly goes the other way, even if there is debate among philosophers about which metaphysical framework best accommodates such cross-temporal facts. We can surely admire Socrates now even if he doesn't exist now ([Soames, 2002](#), appendix to Ch. 3); and if Socrates has the property of being someone whose past actions make him currently worthy of admiration, then there can be no metaphysical objection to the view that a deceased man has the property of being someone whose past wishes or interests make them currently deserving of respect. In fact, some of the other arguments that Tremellen and Savulescu use depend on the very possibility of other cross-temporal attributions to humans who no longer exist. For how else can a deceased person 'gain benefit prior to death from actions taken after death'? Prior to death, there are no actions that can confer a benefit; and after death there is no person to benefit. And how else can a husband 'be harming his wife' by not allowing his widow access to his sperm after death? Whatever harm there is, it is not inflicted until after the man has died and his widow makes a request that is then denied; and at this point there is no person to inflict the harm.

Tremellen and Savulescu's overall argument thus appears fundamentally flawed. Their treatment of the interests of the deceased appears to be based on a simplistic metaphysics, and their consequent assignment of low weight to agent autonomy quite unconvincing. It is true that the policy Tremellen and Savulescu support with their argument contains an opt-out provision, and so allows men to deny consent to the

procedure. This appears to be a concession to the idea of autonomy on the part of Tremellen and Savulescu, and it may be tempting to think that such a concession blunts the force of the above criticism. But it does no such thing. If anything, it leaves us with a puzzle. It is hard to see why a refusal to consent while the deceased was still alive should be considered binding under the philosophical position they espouse – why the wishes of the deceased's partner don't simply allow such a refusal to be overridden if she decides not to take the refusal as a reason for her to reject the chance at PSP and posthumous conception. Of course, an opt-out scheme that allows registered wishes to be overridden in this way may prove to be quite unacceptable from the point of view of healthcare politics, but that is a different matter. Expediency aside, such a scheme would seem best to accord with the ethical principles to which Tremellen and Savulescu subscribe.

In short, I take there to be compelling reason to reject Tremellen and Savulescu's defence of presumed consent. But nothing I have said shows that the position they espouse is thereby indefensible. Indeed, I think that in principle there is much to be said in favour of something like Tremellen and Savulescu's position, but not on the grounds they give. What really undergirds their argument, in my view, is an unspoken assumption that the argument doesn't defend or even articulate; this unspoken assumption is a distinctive but contestable view about how we should view the nature of gametes, including sperm, and their potential for use. (Note that I take this assumption to underlie Tremellen and Savulescu's defence of presumed consent. I don't claim that it underlies other attempts to defend such a policy, such as [Young, 2014](#).)

Because Tremellen and Savulescu nowhere articulate this assumption, it is difficult to be sure of the details and so my account will be schematic. Here is my best guess. (i) On the model Tremellen and Savulescu have in mind, a man's viable sperm is a pure genetic resource, usable by his partner, and benefiting both the man and his partner if he is alive and a child is produced, but his partner alone if he is deceased and the sperm is released to her for purposes of conception. (ii) As a pure genetic resource, the sperm is something the deceased has no interests in, apart from its being part of his body. That much is also true of his nails, for example, or (potentially far more useful) any organs or tissue that are able to be transplanted. This limits his autonomy, since none of these things can be used to his benefit after death (and not merely because there is no 'him' to benefit). What we have instead are desires that the man had for the future, including desires that his sperm be used a certain way; but satisfaction of such desires does not confer a benefit on him since they are not desires for himself, not being centred on him. (iii) As a result, any duties he has as a moral agent prior to death can only involve the way he might enable this resource to confer a benefit to others, especially to his partner since she is the one who can benefit most directly through PSP-based conception (hence the duty of 'easy rescue'). (iv) As a pure genetic resource, viable sperm is much like a bodily organ apt for transplanting; all things being equal, the moral thing for men is to facilitate donation. In practical terms, this is best done through a regime of presumed consent with an opt-out clause. An opt-in scheme, by contrast, would severely limit the use of

sperm as a genetic resource, to the detriment of the potentially many partners of deceased men who would benefit from a more liberal scheme. This would even be true, although to a lesser extent, if the condition of consent was changed to implied consent.

The crucial element in this model is the idea of sperm as a pure genetic resource, so we might call it the pure resource model. Much more could be said in elaboration of this model and the ethical principles that sustain claims about how sperm in this model can, or should be, dealt with when there is a demand for it, including after death. Instead of providing more detail, I will try to lend clarity to the model by outlining a competing model, which I'll call the relational model. It is the relational aspect that sets it apart from the pure resource model.

I take this relational model to be the model at play in the debate between the two standard positions discussed earlier: explicit versus implied consent as a necessary condition on PSP and PSP-based conception. In this new model, gametes, including sperm, are invested with what I'll call centred relationship potential: we care about our potential offspring, seeing them as *our* offspring, a relationship that is centred on us. For that reason, we don't consider sperm to be a pure genetic resource in which we can't sensibly be said to have interests after death. If the sperm are used to conceive a child, the child is ours, even if we are not around to help rear the child. Because of its relationship to us, we have a vested interest in what happens to that child. That is precisely why we might refuse to give explicit consent to having our sperm used for the purpose of posthumous conception. Whether or not this is rational, we may not want a child of ours to be brought up in a way, or under constraints, that we would not accept for someone who is *our* child, someone to whom we stand in a centred relationship. That is also why there is no clear duty of 'easy rescue': a man may have a *prima facie* duty to help his partner achieve happiness through helping her conceive a child, but since it is also *his* child it is morally appropriate for him to make sure his interests are protected, something that he may recognize cannot be guaranteed if he consents to PSP and PSP-based conception. This is also why agent autonomy and the quality of the consent matters so much (and why there is a legitimate debate about the respective merits of explicit versus implied consent).

Let me make three points before asking how the choice between these models affects what can be made of Tremellen and Savulescu's presumed consent option. The first point to make is that my claim is not that the ethics of PSP is somehow determined by these models, but only that they add strong weight to certain ethical prescriptions. I agree that someone might accept the pure resource model and still think that, independently of the model, explicit informed consent is needed if sperm to be taken from a person's body after death (see, for example, Björkman and Hansson, 2006, whose 'first principle of bodily rights' claims that no material may be taken from a person's body without that person's informed consent). Secondly, there are other ethical perspectives that make room for the idea of relationship in somewhat different ways. Consider, for example, Confucian ethics and its account of the special duties that come from relationships and roles, including those incurred on the basis of filial piety (see, for example, Tsai, 2005, which considers Confucian ethics in

relation to bioethics). Confucian ethics may give us a different way of understanding why we (should) care about our potential offspring, although a way that is broadly compatible with the relational model described above.

A final point is that the apparent conflict between the pure resource and relational models provides us with an answer to something that was of concern in Tremellen and Savulescu's argument: the apparent mismatch between their theoretical position and what they argue for: presumed consent, with an opt-out scheme that gives men a binding ability to refuse consent. We can view such a scheme as what would be appropriate in a pluralist society in which there are different conceptions of the nature of gametes and their potential for use. While the pure resource model may be the correct or appropriate model, we need to make room for those who accept the relational model and so need to recognize that some men may choose to opt out. Doing so allows us to accommodate those who refuse to give their consent, without requiring us to slate their position as immoral. (Such an opt-out scheme may even allow the refusal of consent to be overridden in certain cases, although for such a scheme to be politically acceptable the reasons for overriding will need to engage with the reasons for refusal. Whether even this much will be politically acceptable is bound to depend on which model of sperm and its potential for use dominates the conversation about PSP.)

Resolution?

I have suggested that Tremellen and Savulescu's argument for letting presumed consent suffice for PSP and posthumous conception is beset by serious difficulties, but that the option might be defended by seeing it as based on a certain unspoken assumption: the assumption that sperm should be viewed as a pure genetic resource rather than as something that, in my terms, has centred relationship potential. 'Might be defended' is one thing; but is the assumption actually defensible? That is a difficult question for a number of reasons. First, because of the way the different models support different ethical perspectives on the debate, the choice between them might be thought to be partly an ethical one. I am dubious, but even if this is true it doesn't affect the argument, since nothing suggests that the models presuppose specific ethical notions like autonomy and consent. Nonetheless the question of which (if either) model is correct ought to strike us as a peculiar one, since it is clearly not a question about the natural properties of sperm. It is more a question about, so to speak, one's attitude to one's sperm and its potential: it is a question about how we take this potential to affect us and others and thereby to affect decisions we might make. To take sperm as a pure genetic resource is just that: it is to take it as a pure genetic resource, and not as anything more. Similarly, to take sperm as having centred relationship potential is to take it in a way that incorporates much more: in particular, as supporting concern for any future offspring because of their relationship to us. It is scarcely surprising that such different attitudes should inspire different answers to the question of what is ethically permissible or required.

But the focus on attitudes also makes it clear that the question of the correctness (or appropriateness) of one or

another model is a complex one. We would first need to give an account of what correctness of models means in this context (not easy, I suspect), and then evaluate the models accordingly. Here is one possible kind of answer, clearly far too crude as it stands. Consider the sense in which it would be incorrect – indeed, deeply irrational – to take a centred relationship attitude to one's big toenails, say, declining permission to have them harvested after death even if lives could be saved that way. A centred relationship attitude to one's sperm would arguably be incorrect in somewhat the same sense if it turned out (contrary to accepted belief) that genetics has very little to do with a person's overall development as a human being – that biological parents merely provide the physical wherewithal that the environment then shapes.

Rather than approach the question this way, there is another sort of answer to the question, to be found in sociology rather than in natural science or philosophy. We should ask which model best accommodates the way men actually think when they contemplate the possibility of PSP and posthumous conception. The question is worth asking, for if, as I have suggested, these two models help to explain people's views about which consent option is appropriate, then we need to know whether a pure resource model is one that reflects the attitude of most men to sperm and its potential use. It is doubtful, however, that the pure resource model has such acceptance. The very fact that, until very recently, explicit and implied consent have been the only forms of consent that have featured in discussions about these procedures provides some evidence of this; the focus on such forms of consent suggests that we think that where sperm donation is concerned, even donation after death, men have a more intimate stake in the decision than they have in the case of a decision to be an organ donor, say.

Of course, the only way to find out with a reasonable degree of confidence how men really feel about this would be to survey a representative sample in order to 'ascertain the hypothetical desires of men who are still alive in relation to the possibility of (biologically) fathering children after death' (Jones and Gillett 2008, p. 282), although in a way that allows us to determine which of these models, if any, best accounts for these hypothetical desires. It is worth emphasising that none of the surveys now in existence come anywhere close to providing such information. The most promising survey to date is that of Hans (2014), but what needs pointing out is that the responses of subjects in the survey, as well as the reasons they gave for wanting or not wanting their partners to be able to use their sperm after death, are fully consistent with subjects' having an overwhelming preference for a properly administered policy of explicit consent (on the basis, say, that because it is *their* potential child, they should be able to make the decision whether they want their partner to have the child). Until we have the appropriate information, we should remain sceptical of the view that the attitudes of (most) men towards sperm and its potential use after death reflect something like the pure resource model rather than the centred relationship model. If so, we should be correspondingly sceptical of the political-sociological acceptability of a regime of presumed consent.

Let me briefly review what this paper has tried to accomplish. After outlining the standard debate about what kind of consent is appropriate for PSP and PSP-based conception, and then presenting Tremellen and Savulescu's

argument for an alternative presumed consent position, I described a number of problems faced by this argument. But I also stressed that these problems affect the argument, not the position itself, and then articulated what I took to be an underlying assumption of the argument: a 'pure resource' model or way of understanding sperm and its potential for use. Whether or not a cogent argument can be developed to show that this model captures the way sperm and its potential for use should be viewed, my final point was that this may in the end be irrelevant from the point of view of implementing a policy of presumed consent. There is a competing relational model, and as things stand at present the influence of this model on discourse around the use of sperm may mean that there is a good chance that the policy won't sell.

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